

A STUDY ON THE POPULATION HEALTH INDICATORS IN AL-ZUWAIN VILLAGE-BASRAH

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ABSTRACT

OBJECTIVES AND BACKGROUND

The present report exhibits the results of a household survey conducted in Al- Zuwain Village. The village is located in the north of Basrah city. The main purpose of the survey was to provide basic information on health status, health action and other aspects of the studied population.

PATIENT AND METHODS

A sample of 181 households occupied by 1431 individuals were visited and interviewed in details on their health related aspects. A special questionnaire form was used to collect the data by the investigator assisted by local people.

RESULTS

Overall, children aged less than 15 years represent 41.6%, People aged 65 years and higher represent 2.5% only. Gender-wise, slight excess in females was noticed. Regarding health status, out of the total population studied, 187(13.1%) reported some sort of acute illness for different systems of the body and 1244 (86.9%) did not report any illness during the same recall period. Females complaining of acute illness, in general, during the two weeks were 116 (15.9%) compared to 71 (10.1%) of males. Respiratory system ranked the top in incidence of acute illness in both sexes (males 39 or 5.5% and females 67 or 9.2%). Chronic diseases was reported by 165 (11.5%) of the studied population with hypertension and diabetes mellitus occupying the top ranks of the list in both sexes. People with acute illnesses consulted primary health centre in most of instances of initial action (65.2%), followed by private clinics (21.4%).

CONCLUSION AND RECOMMENDATION

It is highly advised that staff in all primary health care centres to support their work with regular household surveys for specific purposes they set up to support their work. Increasing demand on health care services is expected in the future in the light of the demographic and health characteristics. This necessitates the expansion of the local health care to better respond to population needs. Reproductive health component of the care is one targeted component.

KEYWORDS: *Zuwain Village, Primary Health Care Centres, Reproductive Health, The North of Basrah City, Al-Deersub-District, Qurnah District, Governorate of Basrah & Health Indicators*

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1. INTRODUCTION

1.1. Al-Zuwain Village

1.1.1. Location

Al-Zuwain village is one of the rural populations of Al-deersub-district, Qurnah District, governorate of Basrah, Southern Iraq. It is located about 35 km from the center of Basrah city, and about 45 km from the center of Qurnah district.

1.1.2. Demographic features

According to the Basrah Directorate General of Health Services, Al-Zuwain village has the following features for the year 2015:

Total population	11837
No. of infant under one year	474
No. of children from 1-4 years	1538
No. of children under five year	2012
No. of pregnant women	474
No. of lactating women	474
No. of women in the reproductive age who are non-pregnant	2130
No. of women in the reproductive life regardless of pregnancy	2604
No. of houses at one point in time	1200
No. of families at one point in time	1500
Average household size (persons per house)	9.9
Average family size (Persons per economic unit)	7.9

1.2. Elaboration on Basic Terms and Concepts in Measuring Population Health

A number of basic concepts need to be further elaborated on at this stage:

Morbidity Rates: A rate is the speed or frequency with which an event or circumstances occur per unit of time, population or other standards of comparison.

Morbidity rates are in exact term that can mean either Incidence rate or Prevalence rate. Two commonly used morbidity parameters:

Incidence Rate: Incidence is the rate at which a disease or event occur or develops within a given population in a defined time period. It does not reflect to the cause of a disease and it is a statistics that look to the overall occurrence within a population and can be used to predict the rate at which occurrence of a disease is increasing or decreasing.

Prevalence Rate: is the number of cases (newly diagnosed and previously existing in current survivors) within a given population. It reflects the penetration of particular disease or event within population and can be used to evaluate the impact that treatments are having on a particular disease.

Household: A household can be either a domestic unit consisting of the members of a family who live together along with non-relatives such as servants with the living spaces and possessions belonging to such unit or a person or group of people occupying a single dwelling with pooled economic expenditure.

1.3. The Present Study

It is proposed to carry out a household survey in Al-Zuwain village during 2016 to achieve the following objectives:

- To provide complete set of demographic data for the village as catchment population to Al-Zuwain primary health care centre.
- To measure selected health status indicators (crude birth rate, incidence rate of acute conditions, prevalence of selected chronic diseases).
- To measure the extent of back pain as a specific health problem.
- To measure the level of services utilization of various types.
 - Immunization coverage for infants.
 - Use of ambulatory care in response to illness.
 - Use of antenatal care by pregnant women.

2. METHODOLOGY

2.1. Study Design

The present report exhibits the results of a household survey conducted in Al- Zuwain Village during 2016. The village is located to the north of Basrah city.

The report was based on a cross-sectional household survey involving 181 household (1431 individuals) randomly selected through a systematic approach. A special questionnaire form was used to collect the data by the investigator assisted by local people.

2.2. Study Population

Normal residents of Al-Zuwain village. The sampling unit was the household while the focus of data collection was the individual.

2.3. Sample Size and Sampling

A hypothetical map was made of the village demarcating the boundaries as mentioned in chapter one. A systematic random sample was accepted as the best and feasible sample for the purpose of the study. A sample size was estimated according the following formula:

Sample Size

$$N = \frac{Z^2 \times P(1-P)}{E^2}$$

P= % with acute illness in two weeks taken as 20% (0.2)

$Z=1.96$

$E= 0.02$

$N= 1537$ persons or 219 families (Households) of 7 members per family.

2.4. The Data Collection Tool: The Questionnaire Form

A questionnaire form was compiled for the purpose of the study:

One. Variables which were studied included the following list:

a. Age

Completed age last birth day and was categorized into 16, five year interval groups:

<5, 5–9, 10–14, 15–19, 20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54,
55–59, 60–64, 65–69, 70–74, 75 & above

b. Sex

As male and female.

c. Marital status

child < 10years, Single, married, divorced, widowed.

d. Education

Illiterate, Reads and writes, Attained primary certificate,
Attained intermediate certificate, Attained secondary certificate,
Basic university education (Diploma and bachelor), Postgraduate degree.

e. Current Job

Children below the age of 6 year, Students, Housewife,
Civil governmental employees, Military governmental employees,
Self-employed, Retire, Others.

f. Reported Acute Illness Episode

This was any short term illness which occurred during the two-week recall period preceding the day of interview. It was taken from what people say about their health or health of their dependant family members and answers were classified as:

Yes No

And according to system of the body involved as:

Respiratory - Digestive - Cardiovascular - Musculoskeletal – Genitourinary, etc.

g. Reported Chronic Disease

This was also based on people reporting and it was related to known chronic diseases like:

Hypertension –Diabetes –Cancer-Chronic obstructive pulmonary disease

Chronic/ persistent back pain with some additional inquiries – paralysis -

Thyroid disease –Epilepsy-Skin diseases-G6PD-Blood disorders-Others

h. Coverage of Immunization

Based on evidence from any source available (mother reporting, scar, records, cards) children were considered as having:

Complete immunization up to their age.

Incomplete immunization up to their age.

i. Use of Maternal Care

This is any care obtained while a women is pregnant (Restricted to current pregnant women) for issues related to pregnancy from any source. It was classified as Yes for users and No for non-users.

j. The Action in Response to Acute Illness

This refers to any action taken by the ill person or his family in response to illness for the purpose of amelioration, relief or cure of the illness.

k. Place of Delivery for Children Aged less than One Year

Hospital versus home delivery.

Medically qualified attendant or traditional birth attendant.

3. RESULTS

3.1. Socio-Demographic Characteristics

Out of the 1200 households estimated exist in Al-Zuwain village, 181 households were successfully visited and participated in the study. The total individuals identified in these families were 1431 giving an average household size of 7.9 person per household.

3.1.1. Age and Sex

Table 1 displays the distribution of the studied population according to age groups and sex. The age distribution of both sexes is similar ($P=0.419$). Overall, children aged less than 15 years represent 41.6%, People aged 65 years and higher represent 2.5% only. The remaining 55.9% are people aged 15-64 years. Table 1 pinpoint to a fact that the population of Al-Zuwain village is characterized by high fertility and high population attrition with advancing age.

3.1.2. Marital Status

As shown in table 1, people distribution according to marital status. Of total people studied 42.4% (42.0 of males and 42.9 of females) were engaged in active marital status. When children aged 10 years or less were excluded the percentage of married people increased to 59.0% (56.1% of males and 62.2% of females). The distribution by marital status was statistically different among males and females ($P = 0.001$ and 0.037). Singles were more frequent among males while widows were more among females.

3.1.3. Education and Occupation

Table 2: displays the distribution of the studied population by education and current job, it shows that the highest number and consequently highest percentage is represented by those who are completed primary and it is equal to 204(29.0%) in males. In females the highest number is represented by the group "reads and writes" and it is equal to 240(33.0%). The lowest number was found in those who complete higher education and this is true for both males 57(18.3%) and for females 23(19.8%).

Table 1: Distribution of the Studied Population According to Age and Marital Status by Sex

Age in years	Male		Female		Total		P value
	No.	%	No.	%	No.	%	
<5	98	13.9	116	15.9	214	15.0	0.419
5–9	80	11.4	110	15.1	190	13.3	
10–14	97	13.8	93	12.8	190	13.3	
15–19	88	12.5	67	9.2	155	10.8	
20–24	59	8.4	68	9.3	127	8.9	
25–29	59	8.4	55	7.6	114	8.0	
30–34	50	7.1	46	6.3	96	6.7	
35–39	47	6.7	52	7.1	99	6.9	
40–44	39	5.5	45	6.2	84	5.9	
45–49	30	4.3	21	2.9	51	3.6	
50–54	22	3.1	21	2.9	43	3.0	
55–59	7	1.0	9	1.2	16	1.1	
60–64	9	1.3	8	1.1	17	1.2	
65–69	6	0.9	7	1.0	13	0.9	
70–74	4	0.6	7	1.0	11	0.8	
75 & above	8	1.1	3	0.4	11	0.8	
Total	703	100.0	728	100.0	1431	100.0	
Marital status							
For all population							
Children < 10 Years	177	25.2	226	31.0	403	28.2	0.001
Single	230	32.7	168	23.1	398	27.8	
Married	295	42.0	312	42.9	607	42.4	
Divorced	0	0.0	3	0.4	3	0.2	
Widowed	1	0.1	19	2.6	20	1.4	
Total	703	100.0	728	100.0	1431	100.0	
For persons aged >10 years							
Single	230	43.7	168	33.5	398	38.7	0.037
Married	295	56.1	312	62.2	607	59.0	
Divorced	0	0.0	3	0.6	3	2.9	
Widowed	1	0.2	19	3.8	20	1.95	
Total	526	100.0	502	100.0	1028	100.0	

Table 2: Distribution of the Studied Population by Education and Current Job

Variable	Male		Female		Total		P value
	No.	%	No.	%	No.	%	
Education							
Illiterate	50	7.1	88	12.1	138	9.6	0.0001
Reads and writes	162	23.0	240	33.0	402	28.1	
Completed primary	204	29.0	170	23.4	374	26.1	
Completed intermediate	67	9.5	44	6.0	111	7.8	
Completed secondary	34	4.8	19	2.6	53	3.7	
Higher education	57	8.1	23	3.2	80	5.6	
Children below school age	129	18.3	144	19.8	273	19.1	

Table 2: Contd.,							
Total	703	100.0	728	100.0	1431	100.0	
Current job							
Children below the age of 6 year	129	18.3	144	19.8			0.0001
Students	215	30.6	202	27.7	417	29.1	
Housewives		----	357	49.0	357	24.9	
Civil governmental employees	69	9.8	22	3.0	91	6.4	
Military governmental employees	233.2		0	0.0	23	1.6	
Self-employment including agriculture	245	34.9	0	0.0	245	17.1	
Retired	20	2.8	0	0.0	20	1.4	
Total	703	100.0	728	100.0	1431	100.0	

Also table 2 shows the distribution regarding current job. About one third of males are either self-employed including those engaged in agricultural tasks (34.9%) or students (30.6%). For females most of them are housewives (49.0%) or students (27.7%)

3.2. Health Status

3.2.1. Acute Illness

Table 3 displays incidence of acute illness during the two week-recall period:Al-Zuwain village 2016. It shows that out of the total population studied for all age groups and for both sexes, 187(13.1%) of them reported some sort of acute illness for different systems of the body and 1244 (86.9%) did not report any illness during the same recall period.

Table 4 displays the distribution of reported acute illnesses by broad groups. It shows that the number of females complaining of acute illness, in general, during the two weeks about 116 (15.9%) while the number of male suffering from lower incidence of the same condition about 71 (10.1%).

Among different systems of the body, respiratory system take the highest incidence of acute illness in both sexes (males 39 or 5.5% and females 67 or 9.2%). The other imported reported illnesses in males are those of skin (1.7%), musculoskeletal system (0.7%) and digestive system (0.7%). In females, the other important illnesses reported are those of genitourinary system (1.6%).

Table 5 shows the risk of acute illness in the two-week recall period preceding the day of interview by age and marital status for males and females. As it is seen the risk is very variable with age in both sexes. Regarding age, high risk was reported among male children aged less than 10 years (13.5%) and males aged 50 years and above (24.1%) for those aged 50-59, 13.3% for those aged 60-69 and 25.0% for those aged 70 years and higher. The percentages for females were relatively higher in all age groups. Age pattern among females is similar to the pattern in males except that a high risk was also reported for females aged 40-49 (28.8%). Also significant variation in the risk of acute illness in females but not in males is seen with marital status.

Table 3: Incidence of Acute Illness during the Two Week-Recall Period: Al-Zuwain Village 2016

Reported Acute Illness	Number	%
Yes	187	13.1
No	1244	86.9
Total	1431	100.0

Table 4: Distribution of Reported Acute Illnesses by Broad Groups

Acute Illness Group	Male		Female		Total	
	No.	%	No.	%	No.	%
Respiratory system	39	5.5	67	9.2	106	7.4
Skin	12	1.7	12	1.6	24	1.7
Genitourinary system	3	0.4	12	1.6	15	1.0
Musculoskeletal system	5	0.7	6	0.8	11	0.8
Digestive system	5	0.7	5	0.7	10	0.7
Cardiovascular system	3	0.4	7	1.0	10	0.7
Infections	4	0.5	1	0.1	5	0.3
All others	1	0.1	6	0.8	7	0.5
Sub-total	71	10.1	116	15.9	187	13.1
None	632	89.9	612	84.1	1244	86.9
Total	703	100.0	728	100.0	1431	100.0

3.2.2. Chronic Illness

Table 6 displays risk of chronic diseases as reported by people at the time of study and it shows that 165 (11.5%) of the studied population (in both sexes) was suffering from chronic disease of various types. The remaining 1266 people corresponding to 88.5% did report any chronic disease.

Table 7 displays the distribution of reported chronic illness by specific groups. The most frequent chronic diseases are hypertension (42.9% of total chronic diseases in males and 49.5% of chronic diseases in females) and diabetes mellitus 46.0% in males and 36.6% in females).

3.3. Utilization of Health Care Services

3.3.1. Utilization of Maternal and Infant Care

Table 8: displays the distribution of live births by selected care variables involved. Regarding place of delivery we notice that about 36 cases (78.3%) out of 46 delivery found through the study period took place at home. Only 10 (21.7%) took place at hospitals with no evidence for any other places for delivery. Regarding the delivery supervisor or birth attendant of these deliveries, the results show that 36 (78.3%) were attended by trained midwives and 10 (21.7%) by doctors. No delivery took place at the local primary health care centre because the latter does not provide delivery care.

Table 5: Risk of Acute Illness during the 2-Week Recall Period Preceding the Day of Interview by Age and Marital Status by Sex

Variable	Male (N=703)		Female (N=728)		Total (N=1431)	
Age in Years	No.	Risk(% out of persons in each group)	No.	Risk(% out of persons in each group)	No.	Risk(% out of persons in each group)
<10	24	13.5	48	21.2	72	17.8
10–19	15	8.1	17	10.6	32	9.3
20–29	7	5.9	13	10.6	20	8.3
30–39	9	9.3	7	7.1	16	8.2
40–49	5	7.2	19	28.8	24	17.8
50–59	7	24.1	5	16.7	12	20.3
60–69	2	13.3	3	20.0	5	16.7
70+	3	25.0	3	30.0	6	27.3
Total	72	10.2	115	15.8	187	13.1
P Value	<0.05		<0.05		P<0.05	
Marital status						
Children < 10 Years	24	13.5	48	21.2	72	17.9

Table 5: Contd.,:						
Single	17	7.4	17	11.1	34	8.5
Married	31	10.5	46	14.7	77	12.7
Divorced	0	0.0	0	0.0	0	0.0
Widowed	0	0.0	4	21.1	4	20.0
Total	72	10.2	115	15.8	187	13.1
P Value	>0.05		<0.05			

Table 6: Risk of Chronic Diseases as Reported by People at the Time of Study

Chronic Illness		
Yes	165	11.5
No	1266	88.5
Total	1431	100.0

Table 7: Distribution of Reported Chronic Illness by Specific Groups

Chronic Illness Group	Male		Female		Total	
	No.	%	No.	%	No.	%
Hypertension	27	42.9	46	49.5	73	44.2
Diabetes	29	46.0	34	36.6	63	38.2
Chronic obstructive pulmonary disease	1	1.6	2	2.2	3	1.8
Musculoskeletal CNS	0	0.0	1	1.1	1	0.61
Thyroid disease	0	0.0	4	4.3	4	2.4
Epilepsy	2	3.2	3	3.2	5	3.0
Skin diseases	2	3.2	1	1.1	3	1.8
G6PD	1	1.6	0	0.0	1	0.6
Blood disorders	0	0.0	1	1.1	1	0.6
Paralysis	0	0.0	1	1.1	1	0.6
Total	62	100.0	93	100.0	165	100.0

Regarding the immunization status as one indicator for services utilization by children aged less than one year, table 8 also shows good coverage rate of immunization for all vaccinations in relation to the infants age. Forty three of the 46 or 93.5% had completed the immunization up to their ages at the time of study. Only 3 (6.5%) had incomplete status of immunization for different reasons.

Table 8: Distribution of Live Births by Selected Care Variable

Variable	No.	%
Place of delivery		
Home	36	78.3
Hospital	10	21.7
Total	46	100.0
Birth attendant		
Midwife	36	78.3
Doctor	10	21.7
Total	46	100.0
Immunization status		
Complete schedule up to age	43	93.5
Incomplete	3	6.5
Total	46	100.0

3.3.2. Utilization of Antenatal Care

Table 9 displays the use of antenatal care services by the pregnant women in the area.

The table shows that out of the 35 women who were pregnant at the time of the study of different stages of pregnancy, 31 (88.6%) reported to have used antenatal care during their current pregnancy, while 4 (11.4%) did not use such care. All the users reported the local primary health care centre as the sole source for antenatal care. Regarding the reasons for visiting the centre, the users mentioned three main reasons, immunization by all of them, seeking medical care for some illness by the great majority 30 (96.8%) and follow up reported by 19 ((61.3%). For the 4 women who did not use antenatal care, the reason was that their pregnancy was very early, all were in the first trimester.

3.3.3. Utilization of the Health Care Services for Acute Illness

Table 10 displays patient response to illness and it involve s response to the acute illness which we divided into three categories: 1st, 2nd and 3rd action. We found that all patients with acute illness took positive response as 1st action and the majority of these (65.2%) were to the local primary health care centre.

Table 9: The Use of Antenatal Care by the Pregnant Women

Variable	No.	%
Use of antenatal care		
Used	31	88.6
Did not used	4	11.4
Sources of antenatal care		
Local primary health care	31	100.0
Other sources	0	0.0
Reasons for use among users		
Anti-tetanus immunization only	1	3.2
Immunization and medical care	11	35.5
Immunization, medical care and follow up	19	61.3
Reported reasons for non-use		
Pregnancy was at early stage	4	100.0
Total	31	100.0

Those who sought care at private clinics represented 40 (21.4%). Regarding the second action, 46 (24.6%) of the patients did seek second action; 25 (54.3%) to private clinics, 14 (30.4%) to hospitals, 4 (8.7%) to the local primary health care centre and 3 (6.5%) to other sources. Third action was reported only 2 patients to private clinics.

Table 10: Patient Response to Acute Illness-Al-Zuwain Village 2016

Response to Acute Illness	Order of Action					
	1 st Action		2 nd Action		3 rd Action	
	No.	%	No.	%	No.	%
Nothing	0	0.0	0	0.0	0	0.0
Self medication	3	1.6	0	0.0	0	0.0
Health centre	122	65.2	4	8.7	0	0.0
Hospital	5	2.7	14	30.4	0	0.0
Private clinic	40	21.4	25	54.3	2	100
Others	17	9.1	3	6.5	0	0.0
Total	187	100.0	46	100.0	2	100.0

3.4. Notes on Back Pain

3.4.1. Prevalence

Table 11 displays the risk of having back pain in relation to sex.

Table 11: Prevalence of Back Pain in Relation to Sex

Any Back Pain	Sex				Total	
	Male		Female			
	No.	%	No.	%		
Reported having back pain	64	9.1	31	4.3	95	6.6
Did not have back pain	639	90.9	697	95.7	1336	93.4
Total	703	100.0	728	100.0	1431	100.0

3.4.2. Nature and Source of Care

Regarding the detailed response of people who suffered from back pain, table 12 shows a summary of nature and source of care people sought to deal with their back pain.

Table 12: Response to Back Pain

Nature of response and source of care	No	% Out of Actions	% Out of Total Patients
Nothing	32	28.6	33.7
Self medication + traditional	24	21.4	25.3
Health centre	25	22.3	26.3
Hospital	3	2.7	3.2
Private clinic	28	25.0	29.5
Total actions	112	100.0	----
Total patients	95	-----	-----

4. DISCUSSIONS

4.1. The Study Design

The present study was a household survey using a cross-sectional approach with single visit to the families and houses covered by the study. Thus all the limitations of cross-sectional studies are applicable to the results of the present study. However, the recall period, though short could have expanded a bit the exploration of the experience of the studied population in both health experience and interaction with the health care system.

The sample size was adequate and relatively representative to give a good profile of the population health and health behaviour. It involves important demographic and social characteristics which include different age groups, different sexes, different jobs, different education levels and different marital status.

4.2. Results

At the end of survey 181 houses were visited containing 313 family with total number of people studied 1431, this gives the average family size of (7.9) person per house.

4.2.1. Demographic and Social Features

4.2.1.1. Age and Sex

The sex distribution in Al-Zuwain village was nearly similar for males and females 49.1% and 50.9 % respectively. The age distribution of both sexes was also similar. A consistent feature is the high proportion of children aged under 15 years and a very low proportion of elderly people aged 65 years and above. These features reflect a highly fertile population but also high mortality in Basrah governorate.

4.2.1.2. Marital Status

The present study revealed that 59.0% of people aged 10 years and above were engaged in active marital status. The result indicates a high level of family formation pattern and could be one of the major contributors to the high fertility. The

present figure is slightly higher than a figure of nearly 55% reported by Al-Hilfi in his study based on a wider sample from Basrah governorate.

4.2.1.3. Education and Job

Regarding the level of education in the studied population, the achievement in general is modest as more than half the population had an education of primary or below. Only small proportion had education beyond secondary level. These results suggest that the level of education in this village is lower than the average at Basrah governorate level but similar to a semi urban population in Thi Qar. This is expected as the area is rural in nature.

Regarding the job, housewives compose the highest proportion among females around 49.0%, while self employed including agricultural tasks accounted for the highest proportion among males around 34.9%.

4.2.2. Health Status

4.2.2.1 Acute Illness

Nearly one in eight of the studied population reported some sort of acute illness during the two-week recall period preceding the day of visit, slightly higher percentage of females compared to males. The figures obtained in this study are generally close to figures in other household surveys in Basrah during the last two decades. The relatively high incidence of respiratory illness may be related to time were the study took place during winter season.

4.2.2.2. Chronic Illness

About one in nine (11.5%) of all the studied population reported to have one or more of the major chronic non-communicable diseases. In consistency with other surveys in Basrah and Iraq, hypertensive disorders and diabetes mellitus were the leading reported condition in both sexes

4.2.3 Utilization of Health Care Services

4.2.3.1. Utilization of Maternal and Infant Care

Antenatal Care

The results documented a high rate of utilization of antenatal care by currently pregnant women in Al-Zuwain village. The coverage rate was as high as 88.6% of the currently pregnant women had at least one visit. The non users among the pregnant women were, mainly those in their early pregnancy months. The reason for non-use, though is not a justification for non use of antenatal care, seem acceptable given the nature of population. The WHO however recommends the first visit is to be made during the first trimester and this one of the criteria for adequate antenatal care utilization, and a pregnant woman should make at least four visits during her pregnancy.

Place of Delivery

It was noticed that 78.3% of all deliveries reported during the study took place at home under supervision of trained and skilled midwives while only 21.7% of them delivered under super vision of doctors or skilled medical staff in the hospital. The high rate of home delivery in this population is a reflection of accessibility factors. No delivery services are provided at the local primary health centre, the village is rather far away from the nearest delivery services in Basrah city or northern districts of Basrah governorate. Social and religious factors are other possible determinants of preference of home delivery.

Immunization Status

In our study we restricted the assessment of immunization to children aged less than one year as an indicator of adequacy of the Expanded Programme on Immunization.

4.2.3.2. People Response to Illness

As indicated earlier, two aspects of people response to illness were used, acute episodes and back pain. For response to acute illness, visiting the local health centre was the predominant initial action representing 65.2% of all episodes reported in the two-week recall period. For most of the episodes no subsequent action was taken. However, most of these second or third actions were made to sources of medical care other than the local health centre. The main destiny in subsequent actions were private clinics. The above results indicate that relatively good utilization for the health services available at the PHC center present in the area.

4.2.4. Back Pain

Back pain was fairly common in this population and represents a true burden on them. A substantial proportion of those suffering from back pain sought care from various sources. Consultation of private clinics was more frequent than for the general acute illnesses probably reflecting the perception that back pain needs more specialized care. However, a high percentage of them resorted to self medication. Two explanations are plausible for the high self-medication practice for back pain. The first the chronic nature and the second is the extensive experience with the condition.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

- Household surveys represent a good source of additional information on various aspect of population, they are feasible and of multipurpose approaches to data acquisition.
- The population are young with high proportion of children and few elderly people a reflection of high fertility but counteracted by high mortality. A high marriage rate supports the high fertility. In the light of these results, a high population growth rate is expected to continue in the foreseeable future.
- A good accommodation between the community and the local health care services was documented in this study. High coverage of immunization, high utilization rate for acute illness and high antenatal care coverage by at least one visit are examples of this good accommodation.

5.2. Recommendations

- We highly advise staff in all primary health care centres to support their work with regular household surveys for specific purposes they set up to support their work.
- Increasing demand on health care services is expected in the future in the light of the demographic and health characteristics. This necessitates the expansion of the local health care to better respond to population needs. Reproductive health component of the care is one targeted component. Additional components of primary health care services are also required like dental care.
- Improvement of the communication skills for the medical and paramedical staff.

- Health education regarding the importance of adequate antenatal care, immunization and the importance of continuity in completing the immunization schedule for both children and women in the reproductive age.
- Health education regarding the importance and safety of hospital and institutional health center delivery, with more concentration on that the home delivery should takes place under supervision of trained and skilled personnel usually midwives.

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